

Application Number: 10/506,500

Page: 3

Date: 29. June 2007

### Amendments to the Claims

1. (Previously presented) Method for machine-executable information processing, representing information in a hierarchical data structure consisting of at least two hierarchy levels, wherein
  - the structural configuration can be modeled by input means, in particular, by enabling the insertion of new hierarchy levels and the addition of new elements within existing hierarchy levels,
  - the hierarchy levels are capable of containing elements, each of which is at least able to contain contents, which consist either
    - a) in an elementary structure, whose configuration is not modelable for the purpose of this method; or
    - b) in an aggregate structure, which constitutes a hierarchy level subordinate to the corresponding element,
      - a sub-hierarchy can be added subordinate to an existing hierarchy level, and the contents of an element can either
        - a) be manipulated by input means; or
        - b) be determined by machine-evaluating an expression, which can be manipulated by input means, said expression being able to contain a reference using dynamic binding to refer to at least one other element.
2. (Canceled)
3. (Previously presented) Method according to claim 1, wherein modeling is carried out in an object-oriented way, by having a class structure represent the configuration and properties of a number of aggregate structures of the same kind separately from their individual contents.
4. (Previously presented) Method according to claim 1, wherein parameters for the elements' representation and editing modes are manipulatable by input means.
5. (Original) Method according to claim 4, wherein multiple sets of parameters may exist per element with one of said parameters sets becoming effectual depending on the results of manipulatable expressions.

Application Number: 10/506,500

Page: 4

Date: 29. June 2007

6. (Previously presented) Method according to claim 1, wherein all information, including meta information, is stored persistently, particularly in an object-oriented or relational database.
7. (Previously presented) Method according to claim 1, wherein the expression evaluation is carried out in an optimized way by
  - a) marking the result of an expression invalid if, and only if the expression was modified or the contents of an element referenced by the expression were modified or became invalid and
  - b) updating the result on an expression not until it is needed for representation or in the course of computing another result.
8. (Previously presented) Method according to claim 1, wherein the system architecture allows for a distribution of functions, which enables separate processing for
  - a) visualization and editing of information and meta information,
  - b) serving information and meta information, in particular for purposes of visualization and editing or for input and output directed at external systems,
  - c) parallel evaluation of expressions by means of any number of processors.
9. (Previously presented) Method according to claim 1, wherein the expression evaluation can be extended with external (user-defined) functions.
10. (Previously presented) Method according to claim 1, wherein upon request an external process is notified about changes or invalidations of selectable structure components.
11. (Canceled)
12. (Previously presented) System, which is configured to be capable of executing a method according to claim 1.
13. (Previously presented) Method according to claim 1, wherein the machine-evaluable expression can return contents in the form of an aggregate structure.
14. (New) Software product containing components, which execute in conjunction with hardware a method according to any one of claims 1, 3 to 10, or 13.